



SSC / OOTW



# Objectives

- **Analytic Subjects:** Identify potential analytic subjects in the SSC domain.
- **Analytic Tools:** Identify and assess available analytical tools to address subjects (capability, limitations, etc) Highlight analytic tool shortfalls.
- **Data:** Identify and assess data needs to support analytic tools to address subjects (robustness, limitations, etc). Highlight data voids.
- **Measure of Effectiveness (MOE):** Identify and assess MOEs for analytic subjects in the SSC domain (appropriateness, utility, etc).
- Suggest future Courses of Action to improve usefulness of QDR 2001.
  - **One joint database**
  - **Process matters - QDR process needs to be as explicit as possible**
- Suggest ways to improve joint analysis in the 21st Century.
  - **Analytical “modules” (e.g., process, database, results) on the shelf that can be used whatever problem is posed to the analytical community**
- Identify issues and concerns for QDR 2001

# SSC and OOTW: Goals and Composition

---

- **Goals**

- **Explore analytic subjects, tools, data and MOEs for SSCs**
- **Identify issues and concerns to improve QDR 2001 and 21st century joint analysis**

- **Composition**

- **COL Forrest Crain - Chair**
- **Dr. Dean Hartley - Co Chair**
- **Dr. Warren Switzer**
- **Dr. Phil Barry**
- **Major Glen Roussos**
- **Ms R. Beall**
- **Mr Bruce Harris**
- **Mr Karsten Englemann**
- **...and the usual suspects**

# Current SSC/OOTW Analysis Challenge

- Ability to accomplish SSC - How does one define success, end state - Is the nominated for sufficient for the particular vignette - Adequacy of projected DoD program for achieving U.S. objectives for SSC operations
- SSCs effect on TEMPO - Tradeoff between PERSTEMPO or OPTEMPO vs. Shortfalls - Approaches for reducing stress/tempo problems
- Relationship between the Force posture and Force structure for SSCs
- Force capabilities
- Tolerance for collateral damage and US losses
- Disengagement under a variety of circumstances (e.g., completion, MTW)
- Requirement for specialized units for SSCs
- Specialized command and control
- More training on SSCs
- Refugee resettlement
- Assisting in local elections
- SSCs effect on MTW
- Funding to support SSCs - Projections based on historical information as to the cost of SSCs
- Effect of Force ceilings
- POE vs. simultaneous with MTW (e.g., what if you can't disengage from an OOTW to go to a MTW) - Implications of rapidly disengaging from SSC operations
- Post SSC reconstitution of units
- Cumulative impact of SSCs on force readiness
- SSCs impact of readiness
- Infrastructure (rail and road networks, communications, airbases, ports, etc.)
- Resource needs e.g., PGMs for OOTWs per year
- Force structure, readiness, OPTEMPO, sustainability, mobility
- How many SSCs can be undertaken?
- Potential impact of SSC operations on MTW posture
- What MTW elements are most impacted by SSCs
- Relative importance of certain types of DoD capabilities to support SSCs - Composition, size and training for JTF HQ and rotational (on call) units (CS, CSS and combat) to provide Joint Capability to respond to SSCs
- Military support to civil laws and order and public security, not just military security
- Roles, responsibilities and resources for liaisons to support both SSC responses and engagement activities
- HUMINT to support SSCs
- What changes to the force structure and/or doctrine would better enable US military forces to successfully conclude SSC
- What are the utilization rates and tasked core/collateral missions for each SOF major force element or platform
- What are the reserve components utilization rates and contribution to the core/collateral mission
- What is the impact of contingency and other operations on SOF readiness levels
- What mission shortfalls occur in contingency and theater engagement activities
- What is the effect of SOF engagement activities (Peacetime psyop, FID, etc.) on NCA/Theater Cinc's flexible deterrent options and the likelihood, intensity and duration of conflicts
- What is the role of contract support personnel and what military forces can/should they replace?
- What is the international, NGOs and private voluntary organizations (IO/NGO/PVO) in contingency operations and what military forces can/should they replace
- What is the effect of non-combatants/displaced persons in the battle area and how does that affect civil affairs missions (civil-military vs. civil administration operations)?
- What is the additional cost of engagement and contingency activities?
- What critical equipment/skills are required for engagement activities and various contingency operations
- What are the C4ISR requirements for operations and "reach-back" if major support elements remain outside an operational theater?
- Is there sufficient lift to deliver SOF forces to the operation in time to be effective
- What are the logistical requirements to sustain engagement activities and conflict?
- What is the effect of forward basing on personnel, operational costs, support costs, C4ISR and mobility requirements?
- Do engagement activities reduce the cost of contingency operations by reducing the likelihood, intensity and duration of conflicts?

# **SSC/OOTW Unresolved Analysis Issues**

---

- **How to restructure the US Government interagency process to better manage SSCs?**
- **How do we quantify the importance of SSCs to DOD's mission as compared to MTW?**
- **How do we balance low risk but high frequency operation with high risk low frequency operators?**
- **How do we recognize and measure success**



# SSC/OOTW Tools

- SOFAS-DCBY2K Special Operations Force Allocation System Dynamic Commitment Beyond Year 2000
- Force Allocation and Deployment System (USMC)
- GCAM SSC Applications General Campaign Analysis Model (Navy)
- FA&CT Force Allocation and Capabilities Tool (Army)
- FSA - Full Spectrum Analysis Tool (USAF)
- UOB Unit Order of Battle Data Access Tool (DMSO)
- MRM Mission Requirements Module (JWFC/J-7)
- SABRINA (UK/OSD PA&E)
- FORSAT Force Structure Analysis Tool (Navy)
- FDP KAT Formal Data Products Knowledge Acquisition Tool (DMSO)
- DOD KAT DOD Knowledge Acquisition Tool (DMSO)
- CMMS Conceptual Models of the Mission Space (DMSO)
- SEASTATE (Navy)
- COST Contingency Operations Support Tool (USD-C/IDA)

# SSC/OOTW Tool Organization

- There are innumerable tools, versions of tools, models and so forth that have varying degrees of applicability to SSC analysis. Therefore, a list of tools etc. is of limited use both because of its size and complexity and because of its continued growth and change.
- What is of greater utility is a typology of the tasks that these analytic aids need to help us with. At its simplest level this typology is :
  - What: (Tasks etc. that need to be accomplished) Action Required: Identify tasks
  - Who: (Capabilities to accomplish the what) - Action Required: Identify Who
  - How: (What is done by the capability to accomplish task) - Action Required: Identify How
  - Store: Archive the above in retrievable, analyzable, exportable form that is compatible with other common systems (microsoft? PC- Based Systems) .
- Model development should focus on accurately capturing service processes and data and producing joint level results without losing service fidelity
- Modeling SSC outcomes is a task for the future and it is little comfort to realize that we aren't really that far behind those who model major theater war.

# SSC/OOTW MOEs

- Regional Stability, Democratization, Economics, etc. - May form initial set of metrics/MOE's
  - Measures of conditions within the affected country/countries
  - Measures of efforts to provide assistance - **this is a measure of input**
  - Stress (caused by involvement in SSCs) on National Defense Resources
  - OPTEMPO
  - PERSTEMPO - PERSTEMPO for operators and support personnel
  - Coalition involvement/capabilities - input measures
  - How much does each SSC detract from the MTW
  - Requirement usage of critical skills (LD/HD)
  - Measurable impact of SSC on the MTW risk to warfighter
  - Increase casualty
  - Impact of SSCs on unit/force structure shortfalls
  - Impact of SSCs on force projection capability to MTWs
  - Status of active/reserve component (AC/RC) units/platforms accounting for location and type of activity
  - Requirement for and usage of critical skills, units, platforms or equipment (both SOF and Non-SOF unique)
  - Training/Readiness status of units
  - Costs for deployment, operations in support of engagement activities, contingency operations, contract support and other incurred costs
- 
- Consumption rates for selected logistical items
  - Impact of varying levels of Peacetime engagement activities (Peacetime, Psyop, FID, exercises, etc.) on frequency and intensity of contingencies
  - Changes in infrastructure, recruiting, training pipelines, retention, forward basing, PCS rates that affect operations
  - C4ISR support rqmts. Generated within and between theaters by contingency operations
  - Mobility/TPFDD to include relevant dates, numbers of PAX and cargo tonnage/outsize



# SSC/OOTW MOE Issues

- Notes on Measures of Effectiveness:
  - All MOEs are determined by results. Results may be end results or step/phase results.
  - All MOE depend on: a: Who makes the assessment; b. the definition of "success"; c. the metrics used.
  - Effectiveness and efficiency are not the same. Excessive inefficiency may preclude effectiveness. In terms of finite resources and a varying milieu, efficiency relates to effectiveness as a matter of degree.
  - Care must be taken to understand what the metrics actually measure. Effectiveness often is a composite of a series, the ultimate result of which may be expressed in widely different form.
- Indicators and Warnings might lead to early intervention
- MOEs are quantitative and measures of success are qualitative
- Two types of MOEs - what effects us vs. what effects others
- View MOEs from the perspective of individual needing help, the coalition/nation/the US DoD perspective

# SSC/OOTW Data

- **Intel Data**
- **POM Forces**
- **Readiness - OPTEMPO, PERSTEMPO**
- **Force Availability**
- **Military capabilities required/SSC**
- **Historical database SSC response, training, exercises, maintenance, deployments and reasonable projections into the future**
- **Local infrastructure/SSC (at least big picture items that affect force selection)**
- **Logistics**
- **Alternate force structure variations (escalating forces)**
- **Climatology data for contingency operations**

# SSC/OOTW Data Issues

- What is the standard for readiness data
- How do you project readiness data
- Combat readiness vs. SSC readiness vs. peace time engagement readiness
- Quality Database for postgame analysis
- Data exchange among participants
- Assumptions that drive particular pieces of data
- Who is using data and what is the purpose for which it is being generated
- Standard template for database
- Security concerns/requirements for planning, civil security
- Clear definition of objectives before SSC begins
- Have we identified all POD responsibilities that the NSC has assigned responsibility for each task
- Identify SSC on US-only and combined
- Intel - Quality/Detail of Intel input to each quarter of DC play - each vignette sensitive to time at which it is played

# Assessment of Adequacy of Current Approaches

Challenge	Approach 1	Approach 2	Approach 3	Approach 4	...	Approach 10
Challenge 1	HI			HI		
Challenge 2		HI	HI		MED	
Challenge 3						
Challenge 4	MED		LOW	LOW		LOW
Challenge 5						
Challenge 6		MED		MED	HI	HI
.	LOW		MED		MED	LOW
.						
Challenge 10		MED		LOW		LOW

# Summary

- **There is homework to be done...**
- **Briefings and work group products will be hosted on the MSIAC web site**  
**<http://www.msiac.dmsso.mil>**